



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,748	01/03/2002	Graham George Strachan	01223	1986

23338 7590 08/28/2003

DENNISON, SCHULTZ & DOUGHERTY  
1745 JEFFERSON DAVIS HIGHWAY  
ARLINGTON, VA 22202

EXAMINER

SAYALA, CHHAYA D

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 08/28/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/926,748

Applicant(s)

STRACHAN ET AL.

Examiner

C. SAYALA

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear what applicant means by "atomic ratio". Is this the ratio of atomic weights or atomic mass?

### ***Claim Rejections - 35 USC § 102/35 USC 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 4-5 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over CA 2044048.

Art Unit: 1761

The CA patent teaches a drilling fluid, which is a mixture of powdered sulfur in aqueous liquid and further comprises calcium carbonate and bentonite clay. The amounts are given at claims 1 and 5. Instant claim 10 is shown at reference claim 7. The rejection is being made under both statutes because it is not clear what "atomic ratio" signifies as a unit describing amounts. As indicated above, 'atomic ratio' is of indeterminate scope as long as it remains undefined. The burden is being shifted to applicant to clarify this unit and to provide a comparison of the units/amounts provided by the reference and amounts in the units claimed herein. Note that "soil conditioning" is being deemed as "use" terminology and it is well established that for composition claims, intended use of an otherwise old or obvious composition cannot render a claim patentable. A mere discovery of additional result in the use of the same old added materials in a composition cannot, of itself lend patentability to the claims. In re Zierden, 162 USPQ 102, In re Jones, 50 USPQ 48, In re Spada, 15 USPQ 2d, 1655, In re Thuau 57 USPQ 324.

***Claim Rejections - 35 USC § 103***

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over AU 36066/97 in view of EP 924176, Wommack et al. (US Patent US 5997599), and Ott (US Patent 4321079).

The AU patent teaches a suspension of calcium carbonate, which contains sulfur and a gelling agent. See abstract, claims 1-2. Sulfur is added as an additional ingredient. See page 8, lines 3-4, 9-10, 15-17. Amounts are shown at page 7. The

Art Unit: 1761

amounts are described in units different from those claimed, but they appear to overlap. The patent teaches that the fineness and density of the precipitated calcium carbonate can be varied as desired. See page 6, last two lines. See also page 7. The patent does not teach that the calcium carbonate is non-amorphous, or the particle size.

EP '176, Wommack et al and Ott, are all drawn to suspensions of calcium carbonate and sulfur, respectively. They teach that the particle size required to make such suspensions is less than 10 microns. See examples IV to VI in '079, and abstract in '599. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the particle size used in the suspension of the primary reference would be similar to those generally used in prior art, as established by the secondary references, which is less than 10 microns. It would also have been obvious to use rock lime as the calcium carbonate, the commonest form of calcium carbonate used in soil conditioning, and, which is non-amorphous.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA at Group 1761, telephone number (703) 308-3035.

Art Unit: 1761

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0661.



C. SAYALA  
Primary Examiner  
Group 1700.